Outline of the Project

Project Location
4 schools in Ulaanbaatar City
- School No. 75, Khan-Uul District
- Chingeltei 7th Khoroo School
- School No. 53 (extension), Bayanzurkh District
- School No. 109 (extension), Nalaikh District

Period of Construction
August 2018 to July 2020 (24 months)

Structure
- Foundation: Reinforced Concrete (RC) independent footings with foundation beams
- Superstructure: RC frames with cast-in-place RC slabs
- Roof: RC roof slabs for Classroom Blocks
- Steel roof structure for Gymnasium Blocks

Components
Facility Contents

<table>
<thead>
<tr>
<th>Facility</th>
<th>Site</th>
<th>School No. 75</th>
<th>School No. 53</th>
<th>School No. 109</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Re-build</td>
<td>CH 7th Khoroo School</td>
<td>Bayanzurkh</td>
<td>Nalaikh</td>
<td></td>
</tr>
<tr>
<td>Classroom (36 seats)</td>
<td>(CWD accessible)</td>
<td>23 (3)</td>
<td>18 (3)</td>
<td>12 (3)</td>
<td>8</td>
</tr>
<tr>
<td>Multipurpose room</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ICT laboratory</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Child development Center</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Craft room</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Administration rooms</td>
<td>Teachers rooms and rooms for administrative staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchen/Cafeteria</td>
<td>Cafeteria</td>
<td>Cafeteria</td>
<td>Pantry</td>
<td>Pantry</td>
<td></td>
</tr>
<tr>
<td>Auditorium</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gymnasium</td>
<td>Large</td>
<td>Large</td>
<td>Small</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiler Room</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Generator Room</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floor Area (sq.m)</td>
<td>6,317.32</td>
<td>5,060.30</td>
<td>3,345.93</td>
<td>2,649.73</td>
<td></td>
</tr>
<tr>
<td>Total Floor Area (sq.m)</td>
<td>17,373.28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equipment
- School furniture and basic educational equipment

Capacity
- School No. 75: 23 classrooms, 828 seats
- Chingeltei 7th Khoroo School: 18 classrooms, 648 seats
- School No. 53: 12 classrooms, 432 seats
- School No. 109: 8 classrooms, 288 seats
- Total 61 classrooms, 2,196 seats; 4,392 students in 2 shifts

Client:
Ministry of Education, Culture, Science and Sports
Metropolitan Department of Education

Consultant:
Matsuda Consultants International Co., Ltd.
Local Partner: Goo-Van Consulting Co., Ltd.

Contractor:
IWATA CHIZAKI-DAI-NIPPON JV
Local Contractor: Mukhia LLC.

Japan International Cooperation Agency
Concept of the Project

Project Purpose
The Project intended to achieve twofold aim. Firstly, it aims at improving educational environment for mitigating the shortage of school facilities resulting from a rapid population increase targeting the most needed districts. The Project will then construct quality primary and secondary school facilities as models, that are ultimately envisioned to address social needs related to address cross-cutting issues growing in the country, focusing on accessibility for CWDs (children with disabilities), disaster preparedness and environmental friendliness.

Design Principles
The facilities are designed incorporating “universal design” principles that enables all individuals to use easily and safely, regardless of their disabilities, age and sex, with particular focuses on the above three issues:

All floor levels will be connected with a gently sloping ramp aligned with international standards at the center of the buildings which allows users barrier-free access to all functions in new buildings, and also to all floors in existing buildings. CWD-accessible classroom and multifunctional toilet will be provided to each floor. The Project will also provide Child Development Center for children with special education needs.

In terms of disaster preparedness, buildings are designed as earthquake resistant according to the revised seismic code. In addition, firefighting/alarming and emergency equipment will be installed according to the latest regulations. The schools are expected to be an evacuation center in the community.

Buildings are designed considering total energy saving. Material with high insulation efficiency are used for external thermal insulation and energy/resource saving equipment, such as LED lights and high-efficiency boiler will be used. Environmentally-effective method of school operation will be established thorough “soft-component” of the Project.